

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND

IN RE: TITANIUM DIOXIDE ANTITRUST  
LITIGATION

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CIVIL ACTION NO.: RDB-10-0318

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THIS DOCUMENT RELATES TO:  
ALL ACTIONS

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**MEMORANDUM OPINION**

This case concerns an alleged price-fixing conspiracy in the market for titanium dioxide. Plaintiffs Haley Paint Company and Isaac Industries, Inc., and Intervening Plaintiff East Coast Colorants, LLC d/b/a Breen Color Concentrates (collectively, “Plaintiffs”) claim that Defendants E.I. du Pont de Nemours & Co. (“DuPont”), Huntsman International LLC (“Huntsman”), Kronos Worldwide Inc. (“Kronos”), and Millennium Inorganic Chemicals, Inc. (“Millennium”) (collectively, “Defendants”) engaged in an unlawful conspiracy in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1, to fix, raise, or maintain the price of titanium dioxide in the United States.<sup>1</sup> Plaintiffs allege that as a consequence of the

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<sup>1</sup> In addition to the named Defendants, Plaintiffs have named several co-conspirators, including, *inter alia*, Tronox Inc. (“Tronox”) and The National Titanium Dioxide Company Ltd. (d/b/a “Cristal”). Tronox filed for Chapter 11 bankruptcy protection in January 2009, and is therefore precluded from being named as a defendant. *See* 11 U.S.C. § 362(a). Plaintiffs originally sought to include Cristal as a named defendant in this case, but this Court dismissed Cristal for want of jurisdiction on March 31, 2011. *See* Mem. Op. and Order, ECF Nos. 101 & 102. Subsequently, Plaintiffs have sought formal reconsideration of that decision on two occasions. On April 3, 2012, this Court denied the Plaintiffs first motion for reconsideration by Memorandum Order (ECF No. 268). At the August 13, 2012 Class Certification hearing, this Court again denied the Plaintiffs’ request to add Cristal as a defendant. *See* Order, ECF No. 332.

unlawful conspiracy, Defendants were successful in charging artificially inflated prices for titanium dioxide products—thereby injuring all Plaintiffs.

Presently pending is Plaintiffs’ Motion for Class Certification and for Appointment of Class Counsel (ECF No. 246). This Court has reviewed the record, as well as the pleadings and exhibits, and conducted a full-day class certification hearing on August 13, 2012. For the reasons that follow, Plaintiffs’ Motion for Class Certification will be GRANTED.

## **BACKGROUND**

### **I. THE PLAINTIFFS’ FACTUAL ALLEGATIONS**

The allegations contained in the Plaintiffs’ Consolidated Amended Complaint (ECF No. 51) were fully set forth in this Court’s previous Memorandum Opinion entered on March 29, 2011. *See Haley Paint Co. v. E.I. du Pont de Nemours & Co.*, 804 F. Supp. 2d 419 (D. Md. 2011) (denying Defendants’ motion to dismiss complaint). That background is repeated here, in part, so as to provide context for the pending motion for class certification.

Defendants are the leading suppliers of titanium dioxide (“TiO<sub>2</sub>”) in the world, and control approximately 70 percent of the global production capacity. Consol. Am. Compl. (“CAC”) ¶ 1. TiO<sub>2</sub>, a so-called “quality of life” product, is a dry chemical powder that is the “world’s most widely used pigment for providing whiteness, brightness, and opacity . . . to many products, particularly paints and other coatings.” *Id.* ¶ 33. TiO<sub>2</sub> has few competitive substitutes, and demand for it tends to be inelastic. *Id.* ¶ 35. Plaintiffs allege that, as a result of a declining market for TiO<sub>2</sub>, Defendants conspired to fix, raise, maintain, and stabilize the price of the product. *Id.* ¶ 2, 69. This conspiracy is alleged to have occurred between

February 1, 2003, through the present (hereinafter referred to as the “Class Period”).<sup>2</sup> *Id.* ¶ 21. During the Class Period, TiO<sub>2</sub> prices increased, and Defendants earned billions of dollars in revenue. *Id.* ¶ 3, 1.

## **II. The Titanium Dioxide Market**

As previously mentioned, Defendants are the market leaders in the production of TiO<sub>2</sub>. The market is global in scope, with the majority of trade conducted internationally. *Id.* ¶ 49. The market for the chemical has high barriers to entry—it is estimated that a new plant would require \$450-500 million and three to five years to build. *Id.* ¶ 43. As a result, the industry is highly centralized. *Id.* ¶ 42-48. Beginning in the early 1990s, prices for TiO<sub>2</sub> began to decline for a variety of reasons, such as global overcapacity and customer consolidation. *Id.* ¶ 68. Prices increased in the late 1990s, but fell significantly in 2001. *Id.* Plaintiffs allege, that as a result of declining prices and declining demand, “Defendants were motivated to reach, and did reach, an agreement or understanding in or about early 2002 to increase prices and improve margins in the industry.” *Id.* ¶ 69.

### **A. Alleged Conspiracy to Fix Prices of Titanium Dioxide**

It is alleged that on January 24, 2002, a TiO<sub>2</sub> industry meeting took place in Finland. *Id.* ¶ 54. Shortly thereafter, and in spite of flat or declining demand for TiO<sub>2</sub>, Defendants and their co-conspirators announced price increases to be effective March 1, 2002. Further price increases were announced and implemented in the summer of 2002. *Id.* The following

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<sup>2</sup> Plaintiffs originally defined the Class Period as beginning in March of 2002. Plaintiffs have since modified the Class Period to begin on February 1, 2003 because “[t]he evidence shows that while the Cartel behavior began as early as 2002, it does not appear to have become fully effective until February 2003. [citation omitted] As a result, and to be conservative, Plaintiffs propose to delay the start of the Class period until February 1, 2003, despite the evidence of illegal antitrust activity before that date.” Pls.’ Class Mem. at 3 n.2, ECF No. 247.

year, a TiO<sub>2</sub> conference took place in Miami, Florida. That conference was attended by Defendants, and the former Vice President of Defendant Millennium specifically told attendees to expect further price increases. *Id.* ¶ 55. Numerous other meetings and conferences were held over the next several years, and those meetings neatly corresponded to TiO<sub>2</sub> price increases during the Class Period. *Id.* ¶¶ 52, 56-61. Plaintiffs allege that it was at these conferences where Defendants agreed and conspired to fix the price and supply and capacity of TiO<sub>2</sub>. *Id.* ¶ 62.

In addition to conferences and trade meetings, Plaintiffs also allege that the conspiracy was furthered through industry publications and through conversations with industry consultants, customers, and others. *Id.* ¶ 51. “After having reached an unlawful agreement or understanding . . . , Defendants used consultants, customers, and others as conduits to signal or confirm intended pricing and other actions to each other.” *Id.* These conversations and signals allowed Defendants to monitor the conspiracy and cut down on potential “cheating,” whereby one participant could undercut the others by reducing their prices. *Id.* Plaintiffs also allege that Defendants privately discussed industry conditions and TiO<sub>2</sub> pricing at dinner meetings before and after the various trade association and industry meetings. *Id.* ¶ 53. In short, Plaintiffs allege that Defendants had ample ability to conspire to fix the price and capacity of TiO<sub>2</sub>.

## **B. Titanium Dioxide Pricing**

According to the Plaintiffs, in the face of declining demand, reduced costs, and increased production capacity, *see* ¶¶ 54, 69, 71, 74, 81-82, 84, 102, the price of TiO<sub>2</sub> actually increased substantially during the Class Period. *Id.* ¶ 103. Plaintiffs allege that Defendant

DuPont, the titanium dioxide market leader, typically would announce a price increase which would be quickly followed by all other Defendants. *Id.* ¶¶ 67, 72-75, 77-78, 80, 82-101. According to the Plaintiffs, Defendants announced and implemented multiple and nearly simultaneous TiO<sub>2</sub> price increases in lock-step fashion. Of crucial importance to Plaintiffs case is their contention that these price increases were implemented in the midst of market conditions, such as declining demand, decreasing manufacturing costs, and excess production capacity, that Plaintiffs allege are completely incompatible with across the board price increases among the market leaders of a product.

Although the price increases were spaced out over five years, they increased in frequency in 2008. Plaintiffs allege that “over the course of approximately 14 weeks, from late May 2008 to early September 2008, Defendants and their co-conspirators announced three separate Titanium Dioxide price increases and at least two energy surcharges,” and that these price increases were made amidst declining demand for TiO<sub>2</sub>. *Id.* ¶ 99.

In light of the market conditions for TiO<sub>2</sub>, Plaintiffs allege that the price increases implemented by Defendants cannot be explained as anything other than an illegal agreement to fix prices and supply of the chemical. In support of this contention, Plaintiffs draw an analogy to the period in the 1990s—where there is no price fixing conspiracy alleged—when industry overcapacity lead to lower prices and slim profit margins. *Id.* ¶ 102. Plaintiffs allege that the price increases were profitable for Defendants. The average price per ton of TiO<sub>2</sub> increased nearly a third between 2002 and 2006, and Defendants increased their operating incomes and margins. *Id.* ¶ 103.

As a result of this alleged conspiracy, Plaintiffs contend that price competition in the sale of TiO<sub>2</sub> by Defendants (who control approximately 70 percent of global production capacity) has been restrained, suppressed, and eliminated throughout the United States. *Id.* ¶ 104. Plaintiffs further allege that prices for TiO<sub>2</sub> have been raised, fixed, maintained, and stabilized at artificial levels, and as a result, direct purchasers of TiO<sub>2</sub> have been “deprived of the benefit of free and open competition in the purchase” of the chemical. *Id.*

### **III. CLASS CERTIFICATION ARGUMENTS—FRAMING THE ISSUES**

In Plaintiffs’ Motion for Class Certification, they seek certification of the following class:

All persons and entities who purchased titanium dioxide in the United States directly from one or more Defendants or Tronox, or from any predecessors, parents, subsidiaries, or affiliates thereof, between February 1, 2003 and the present (“Class Period”). Excluded from the Class are Defendants, their co-conspirators, parent companies, predecessors, subsidiaries and affiliates, and all governmental entities.

Pls. Class Mot. at 1, ECF No. 246. According to the Plaintiffs, “[t]his case is directly analogous to the legion of antitrust price fixing cases that federal courts have routinely certified as class actions.” Pls.’ Class Mem. at 2. In that regard, Plaintiffs maintain that all the Rule 23 requirements are satisfied, and in particular, the predominance requirement of Rule 23(b)(3) has been met insofar as “[t]he trial will focus almost entirely on proving that the Cartel Members formed a cartel and conspired to artificially inflate prices for titanium dioxide, that they were successful in raising prices to supra-competitive levels, and that, as a result of this conspiracy, Class members sustained injury and damages when they paid artificially-inflated prices on their purchases of titanium dioxide.” *Id.* at 2-3.

Defendants argue that this case is not amenable to class treatment and contest certification of this class on the grounds that: (1) the named Plaintiffs have not satisfied the Rule 23(a) requirements of typicality and adequacy of representation; and (2) the Rule 23(b)(3) requirements of predominance cannot be met insofar as the Plaintiffs have set forth a flawed methodology for proving individual antitrust impact and damages on a class-wide basis. More specifically, Defendants argue that the named Plaintiffs' claims are not typical of the class because they are small purchasers of TiO<sub>2</sub>, are located in narrow geographies, and have individual interests antagonistic to the class as a whole. In this regard, Defendants argue that the named Plaintiffs are not adequate class representatives. Regarding the predominance prong of Rule 23(b), Defendants argue that even if the Plaintiffs could prove the existence of a price-fixing conspiracy, proof of individual injury and damages cannot be computed in a class-wide manner, and therefore must be resolved on an individual basis.

On the typicality and adequacy of representation prongs of Rule 23(a), Plaintiffs maintain that each named Plaintiff suffered the same injury—*i.e.*, they paid artificially inflated prices for TiO<sub>2</sub>—and therefore their interests are aligned with the class as a whole. On the predominance prong of Rule 23(b), Plaintiffs contend that they have sufficient class-wide proof to establish individual impact and damages. Plaintiffs plan to present evidence that Defendants colluded to fix the price of TiO<sub>2</sub> in the United States in the form of: (1) proof that Defendants implemented lock-step price increase announcements; (2) proof that Defendants regularly attended industry meetings that facilitated the workings of the conspiracy; and (3) expert analysis regarding the structure of the TiO<sub>2</sub> market and how that structure facilitates collusive agreements. To prove common impact, Plaintiffs plan to

present expert testimony showing that, as a result of the cartel, TiO<sub>2</sub> prices were supra-competitive across the class, and as a result affected each individual member of the class. To prove damages, Plaintiffs rely on the same expert analysis and methodology to show that the “aggregate” overcharge was felt uniformly across the class.

Accordingly, while each element of the Rule 23 class certification analysis will be addressed, this Court will focus on the issues most closely contested by the Defendants—typicality and adequacy of representation, and predominance of common issues.

**THE LEGAL STANDARD FOR CLASS CERTIFICATION UNDER RULE 23 OF THE  
FEDERAL RULES OF CIVIL PROCEDURE**

To obtain class certification, the Plaintiffs must meet all four requirements of Federal Rule of Civil Procedure 23(a), and at least one of the requirements of Rule 23(b). *Gunnells v. Healthplan Servs., Inc.*, 348 F.3d 417, 423 (4th Cir. 2003). Here, Plaintiffs seek certification of the proposed class under Rule 23(b)(3), which requires that common questions of law predominate. “Class certification requires a finding that each of the requirements of Rule 23 has been met” by a preponderance of the evidence. *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d 305, 320 (3d Cir. 2008).

“The class action is an exception to the usual rule that litigation is conducted by and on behalf of the individual named parties only.” *Wal-Mart Stores, Inc. v. Dukes*, \_\_ U.S. \_\_, 131 S. Ct. 2541, 2550 (2011) (internal quotation marks and citation omitted). As recently noted by the Supreme Court in the *Wal-Mart* opinion, “Rule 23 does not set forth a mere pleading standard. A party seeking class certification must affirmatively demonstrate his compliance with the Rule—that is, he must be prepared to prove that there are *in fact* sufficiently numerous parties, common issues of law or fact, etc.” *Id.* at 2551. In ruling on a

class certification motion, a court must take a close look at the facts relevant to the certification question, even if those facts “tend to overlap with the merits of the case.” *Thorn v. Jefferson-Pilot Life Ins. Co.*, 445 F.3d 311, 319 (4th Cir. 2006); accord *Gariety v. Grant Thornton, LLP*, 368 F.3d 356, 366 (4th Cir. 2004) (“[W]hile an evaluation of the merits is not part of a Rule 23 analysis, the factors spelled out in Rule 23 must be addressed through findings, even if they overlap with issues on the merits.”).

The Supreme Court recently noted that “‘sometimes it may be necessary for the court to probe behind the pleadings before coming to rest on the certification question,’ and that certification is proper only if ‘the trial court is satisfied, after a *rigorous analysis*, that the prerequisites of Rule 23(a) have been satisfied.’” *Wal-Mart* 131 S. Ct. at 2551 (quoting *Gen. Tel. Co. of the Sw. v. Falcon*, 457 U.S. 147, 160 (1982)) (emphasis added); see also *Coopers & Lybrand v. Livesay*, 437 U.S. 463, 469 (1978) (“[T]he class determination generally involves considerations that are ‘enmeshed in the factual and legal issues comprising the plaintiff’s cause of action.’”) (quoting *Mercantile Nat. Bank v. Langdeau*, 371 U.S. 555, 558 (1963)).

The “rigorous analysis” that must be undertaken in the class certification context extends to disputes between experts: “Resolving expert disputes in order to determine whether a class certification requirement has been met is always a task for the court—no matter whether a dispute might appear to implicate the ‘credibility’ of one or more experts . . . .” *In re Hydrogen Peroxide*, 552 F.3d at 323-24. Of course, there are limits to a court’s resolution of expert disputes, and “a court should only engage itself in statistical dueling of experts if such dueling presents a valid basis for granting or denying class certification.” *In re Rail Freight Fuel Surcharge Antitrust Litig.*, \_\_ F. Supp. 2d \_\_, 2012 WL 2870207, at \*17

(D.D.C. June 21, 2012) (internal quotations, citations, and alterations omitted). As noted by the Third Circuit, “[t]hat weighing expert opinions is proper does not make it necessary in every case or unlimited in scope[,]” and “[r]igorous analysis need not be hampered by a concern for avoiding credibility issues; as . . . findings with respect to class certification do not bind the ultimate fact-finder on the merits. A court’s determination that an expert’s opinion is persuasive or unpersuasive on a Rule 23 requirement does not preclude a different view at the merits stage of the case.” *In re Hydrogen Peroxide*, 552 F.3d at 324.

## ANALYSIS

### I. RULE 23(a) FINDINGS & CONCLUSIONS

As previously noted, Plaintiffs must first establish—by a preponderance of the evidence—the four requirements of Rule 23(a): numerosity, commonality, typicality, and adequacy of representation. Each will be addressed in turn.

#### A. Numerosity

Rule 23(a)(1) provides that one of the requirements to bring a class action is that the class be “so numerous that joinder of all members is impracticable.” The Fourth Circuit has held that “[n]o specified number is needed to maintain a class action.” *Brady v. Thurston Motor Lines*, 726 F.2d 136, 145 (4th Cir. 1984) (quoting *Cypres v. Newport News Gen. & Nonsectarian Hosp. Ass’n*, 375 F.2d 648, 653 (4th Cir. 1967)). This Court has previously noted that, generally speaking, “courts find classes of at least 40 members sufficiently large to satisfy the impracticability requirement.” *Peoples v. Wendover Funding, Inc.*, 179 F. R.D. 492, 497 (D. Md. 1998).

Here, Plaintiffs assert that at least 700, and as many as several thousand TiO<sub>2</sub> purchasers were affected by the Defendants' alleged conspiracy. *See* Pls. Class Mem. at 18. Defendants do not contest this assertion, and this Court finds that the numerosity requirement is met in this case.

## **B. Commonality**

Rule 23(a)(2) requires a question of law or fact common to the class. “A common question is one that can be resolved for each class member in a single hearing,” and does not “turn[ ] on a consideration of the individual circumstances of each class member.” *Thorn v. Jefferson-Pilot Life Ins. Co.*, 445 F.3d 311, 319 (4th Cir. 2006) (internal quotation marks and citation omitted). The Fourth Circuit has held that, “in a class action brought under Rule 23(b)(3), the ‘commonality’ requirement of Rule 23(a)(2) is ‘subsumed under, or superseded by, the more stringent Rule 23(b)(3) requirement that questions common to the class predominate over’ other questions.” *Lienhart v. Dryvit Systems, Inc.*, 255 F.3d 138, 147 n.4 (4th Cir. 2001) (quoting *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 609 (1997)). Therefore, in the Fourth Circuit “[t]he common questions must be dispositive and overshadow other issues.” *Lienhart*, 255 F.3d at 146. “Thus, the commonality requirement is relatively toothless in comparison with the related requirements of typicality and predominance.” *In re Puerto Rican Cabotage Antitrust Litig.*, 269 F.R.D. 125, 131 (D.P.R. 2010).

As the Supreme Court recently noted, “[c]ommonality requires the plaintiff to demonstrate that the class members have suffered the same injury.” *Wal-Mart*, 131 S. Ct. at 2551 (internal quotations and citation omitted). Here, Plaintiffs allege a multi-year price-fixing conspiracy that led to all class members being subjected to artificially inflated prices

for TiO<sub>2</sub>. Generally speaking, in the antitrust context, “courts have held that the existence of an alleged conspiracy or monopoly is a common issue that will satisfy” the commonality requirement.” 1 HERBERT B. NEWBERG & ALBA CONTE, NEWBERG ON CLASS ACTIONS § 3.10 (4th ed. 2002); *see also* 7A CHARLES ALAN WRIGHT, ARTHUR R. MILLER & MARY KAY KANE, FEDERAL PRACTICE AND PROCEDURE § 1763 (3d ed. 2005) (“the claimed existence of a conspiracy to fix prices . . . in violation of the antitrust laws has been found to present common questions in actions brought by plaintiffs who asserted that they had been harmed by those activities”) (hereinafter “FEDERAL PRACTICE AND PROCEDURE”); *In re Florida Cement and Concrete Antitrust Litig.*, 2012 WL 27668, at \*3 (S.D. Fla. Jan. 3, 2012) (collecting cases).

Plaintiffs have identified several questions that they assert are common to the class. Most notably, Plaintiffs maintain that the existence of the conspiracy is *the* central issue in this litigation. Defendants acknowledge this point in noting that “the commonality element of Rule 23(a) is satisfied because there is at least one common question—namely, whether the alleged conspiracy in fact existed.” Defs.’ Class Opp’n at 15, ECF no. 293. Accordingly, this Court finds by a preponderance of the evidence that the existence of the alleged conspiracy, standing alone, is sufficient to establish commonality. In other words, the Plaintiffs’ claims “depend upon a common contention,” and that common contention is “of a nature that is capable of classwide resolution—which means that its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke.” *Wal-Mart*, 131 S. Ct. at 2551.

### C. Typicality & Adequacy of Representation<sup>3</sup>

Rule 23(a)(3) requires that “the claims or defenses of the representative parties are typical of the claims or defenses of the class.” Fed. R. Civ. P. 23(a)(3). Courts have recognized that the commonality and typicality requirements of Rule 23(a) tend to merge. “Both serve as guideposts for determining whether . . . the named plaintiff’s claim and the class claims are so interrelated that the interests of the class members will be fairly and adequately protected . . . .” *Gen. Tel. Co. of the SW. v. Falcon*, 457 U.S. 147, 157 n.13 (1982). As this Court has previously noted, the typicality requirement determines “whether a sufficient relationship exists between the injury to the named plaintiff and the conduct affecting the class, so that the court may properly attribute a collective nature to the challenged conduct.” *Bullock v. Bd. of Educ. of Montgomery County*, 210 F.R.D. 556, 560 (D. Md. 2002) (citations omitted). The class representative “must be part of the class and possess the same interest and suffer the same injury as the class members.” *Broussard v. Meineke Discount Muffler Shops, Inc.*, 155 F.3d 331, 338 (4th Cir. 1998). Essentially, the typicality requirement ensures that “only those plaintiffs who can advance the same factual and legal arguments may be grouped together as a class.” *Id.* at 340. “The essence of the typicality requirement is captured by the notion that ‘as goes the claim of the named plaintiff, so goes the claims of the class.’” *Deiter v. Microsoft Corp.*, 436 F.3d 461, 466 (4th Cir. 2006) (citing *Broussard*, 155 F.3d at 340).

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<sup>3</sup> In their Class Opposition Memorandum, Defendants make the same arguments for both the typicality and adequacy of representation prongs of Rule 23. *See* Defs.’ Class Opp’n at 42-46. Because the typicality inquiry “tend[s] to merge with the adequacy of representation requirement,” *Falcon*, 457 U.S. at 158 n.13, the Court will address these elements together.

The final prerequisite under Rule 23(a) is that the persons representing the proposed class must be able “fairly and adequately to protect the interests” of all members of the class. The adequacy inquiry under Rule 23(a)(4) “serves to uncover conflicts of interest between named parties and the class they seek to represent.” *Amchem*, 521 U.S. at 625 (citing *Falcon*, 457 U.S. at 157-58 n.13.). As noted by the Fourth Circuit, for a conflict to defeat class certification, the conflict “must be more than merely speculative or hypothetical;” it “must be fundamental” and “go to the heart of the litigation.” *Gunnells v. Healthplan Servs., Inc.*, 348 F.3d 417, 430-31 (4th Cir. 2003) (internal quotations and citations omitted).

The typicality requirement “has been liberally construed by courts . . . [and] in the antitrust context, typicality will be established by plaintiffs and all class members alleging the same antitrust violations by defendants.” *In re Rail Freight*, 2012 WL 2870207, at \*26 (quoting *Meijer, Inc. v. Warner Chilcott Holdings Co. III, Ltd.*, 246 F.R.D. 293, 301 (D.D.C. 2007)). Notwithstanding courts’ liberal reading of the typicality requirement in price-fixing cases, Defendants maintain that the named Plaintiffs’ claims are not typical of the putative class for several reasons. For example, Defendants argue that the named Plaintiffs’ claims are not typical of the proposed class because they “(1) represent a very small portion of the total volume of titanium dioxide sold, (2) purchased a small number of the total titanium products offered by defendants, and (3) are located in narrow geographies.” Defs.’ Class Opp’n at 42.

This Court finds these arguments unavailing. As noted, to establish the typicality prong of Rule 23(a), “a class representative must be part of the class and possess the same interest and suffer the same injury as the class members.” *Deiter*, 436 F.3d at 466. While

some factual differences between the named Plaintiffs and the putative class may exist, they all seek the same relief: overcharge damages as a result of a price-fixing conspiracy in violation of Section 1 of the Sherman Act. *See In re Polyester Staple Antitrust Litig.*, 2007 WL 2111380, at \*10 (W.D.N.C. July 19, 2007) (“In determining whether the claims of the class representatives are typical of the class, the Court looks to the *nature* of the claims asserted (i.e, the legal theory) rather than any specific factual differences amongst class members.”) (citations omitted, emphasis added). Because Plaintiffs’ claims arose from the same alleged conduct, their claims are typical insofar as they will seek relief under the same legal theory and will “tend to advance the interests of the absent class members.” *Deiter*, 436 F.3d at 466.

Defendants also argue that each named Plaintiff will not adequately represent the interests of the class because of specific disqualifying problems. For example, Defendants argue that because Plaintiff Isaac is a chemical wholesaler, it is unlike the majority of the putative class members that are in the business of manufacturing products using TiO<sub>2</sub>. Moreover, Defendants point out that Isaac purchased only a small volume of TiO<sub>2</sub> in 2004, and later sold that product at a profit. Defendants argue that it is therefore unlikely that Isaac suffered any actual injury as a result of the alleged conspiracy.<sup>4</sup> *See* Defs.’ Class Opp’n at 43-44. With respect to Intervener Plaintiff Breen, Defendants highlight deposition testimony by Breen’s class representative that indicates Breen was not aware of any price-fixing until 2011—years after the filing of the lawsuit. Finally, Defendants argue that Plaintiff Haley is also an inadequate class representative. Defendants argue that because

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<sup>4</sup> To the extent that this argument overlaps with the predominance inquiry relating to impact, that argument will be addressed *infra*.

Haley ceased purchasing TiO<sub>2</sub> in 2008, it therefore has no incentive to “prove a conspiracy beyond mid-2008 when it sold its manufacturing business and no longer had a need to purchase titanium dioxide.” Defs.’ Class Opp’n at 45. When Haley did purchase TiO<sub>2</sub>, it purchased the product through a buying group that negotiated low prices, thereby lessening any alleged impact of the price-fixing conspiracy.<sup>5</sup> Moreover, Defendants argue that they have unique defenses pertaining to Haley, particularly with respect to the statute of limitations.

Notwithstanding these minor issues identified by the Defendants, this Court can discern no “fundamental” conflict that goes to the “heart of the litigation.” *Gunnells*, 348 F.3d at 430-31. The thrust of the litigation will concern the *Defendants’* conduct and the existence of the alleged conspiracy. Accordingly, the named Plaintiffs and the putative class will “share common objectives and the same factual and legal positions,” and therefore “have the same interest in establishing the liability of [Defendants].” *Id.* at 431. As such, this Court finds, by a preponderance of the evidence, that Plaintiffs have satisfied the typicality and adequacy of representation prongs of Rule 23(a).<sup>6</sup>

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<sup>5</sup> See *supra* note 4.

<sup>6</sup> Pursuant to the 2003 amendments to Rule 23, the Court’s inquiry into the qualifications and experience of Plaintiffs’ counsel are no longer investigated under Rule 23(a), but instead are to be determined under Rule 23(g). See *infra* at Section IV for that discussion.

## II. RULE 23(b)(3) FINDINGS & CONCLUSIONS

Having determined that the Plaintiffs have satisfied Rule 23(a)'s requirements, the Court now turns Rule 23(b)(3) which requires a finding that common questions "predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy." Fed. R. Civ. P. 23(b)(3). "The Rule 23(b)(3) predominance inquiry tests whether proposed classes are sufficiently cohesive to warrant adjudication by representation." *Amchem*, 521 U.S. at 623. Although the predominance inquiry of Rule 23(b)(3) is similar to the commonality requirement of Rule 23(a), the Fourth Circuit has held that the predominance requirement is "more stringent" than the Rule 23(a) requirement. *Thorn*, 445 F.3d at 319 (quoting *Leinhardt v. Dryvit Sys., Inc.*, 255 F.3d 138, 147 n.4 (4th Cir. 2001)); see also *Amchem*, 521 U.S. at 624 (the Rule 23(b)(3) criterion is "far more demanding" than the commonality requirement). In determining whether the Plaintiffs have satisfied their burden, this Court must conduct a "rigorous analysis" of the Rule 23(b)(3) requirements and the Plaintiffs' methodology for proving those requirements, and must act as finder of fact in the face of conflicting expert testimony. *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 323-24. In order to meet the predominance prong of Rule 23(b)(3), a plaintiff must "demonstrate that the element[s] of [the legal claim] is capable of proof at trial through evidence that is common to the class rather than individual." *Id.* at 311. "Because the nature of the evidence that will suffice to resolve a question determines whether the question is common or individual, a district court must formulate some prediction as to how specific issues will play

out in order to determine whether common or individual issues predominate in a given case.” *Id.* (internal quotations and citations omitted).

With that standard in mind, the Court notes at the outset that, like many courts confronting class certification motions involving horizontal price-fixing claims, it is presented with a battle of the experts with regard to the predominance prong of Rule 23(b)(3). Both parties rely heavily on their respective—and diametrically opposed—expert declarations.<sup>7</sup> Nevertheless, this Court has rigorously analyzed the conflicting testimony, making credibility findings as needed, in order to determine whether Plaintiffs have met their burden on each class certification requirement. *See In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 324. Because much of the conflicting expert testimony is informed by competing factual characterizations regarding the nature of the market for TiO<sub>2</sub>, this Court will first make the necessary factual findings regarding that market before proceeding on to the substantive requirements of Rule 23(b)(3). *See Blades v. Monsanto Co.*, 400 F.3d 562, 575 (8th Cir. 2005) (“[I]n ruling on class certification, a court may be required to resolve disputes concerning the factual setting of the case. This extends to the resolution of expert disputes concerning the import of evidence concerning the factual setting—such as economic evidence as to business operations or market transactions.”).

#### **A. The Titanium Dioxide Market—Findings of Fact**

As will be discussed *infra*, in order for this Court to certify a class in this case, it must be satisfied that the Plaintiffs have set forth a plausible methodology for proving class-wide

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<sup>7</sup> At the August 13, 2012 class certification hearing, the parties did not introduce live expert testimony—instead, they introduced excerpts of deposition testimony, and excerpts of the expert declarations.

impact as a result of the alleged conspiracy. In other words, assuming the alleged conspiracy existed, Plaintiffs still must be able to show that each class member was injured, or “impacted” by that conspiracy through evidence that is common to the class as a whole. Generally speaking, this will require the Plaintiffs to show that the class members paid a higher price for TiO<sub>2</sub> purchased from Defendants than they would have absent the existence of a conspiracy. *See Hanover Shoe v. United Shoe Machinery Corp.*, 392 U.S. 481, 489 (1968) (“when a buyer shows that the price paid by him . . . is illegally high and also shows the amount of the overcharge, he has made out a prima facie case of injury and damage”).

Seemingly following the plaintiff-side class certification script<sup>8</sup> for horizontal price fixing cases, Plaintiffs have introduced an expert declaration that relies, in part, on certain oligopolistic tendencies in the TiO<sub>2</sub> market that Plaintiffs allege facilitate collusion and proves common impact. Specifically, Plaintiffs’ Expert, Dr. Russell Lamb, maintains that (1) the multiple nearly simultaneous price increase announcements indicate coordinated pricing; (2) the TiO<sub>2</sub> market is dominated by Defendants; (3) TiO<sub>2</sub> is a commodity-like product that is interchangeable across suppliers; (4) there are many buyers in the market for TiO<sub>2</sub>; (5) there are high barriers to entry in the market for TiO<sub>2</sub>; (6) demand for TiO<sub>2</sub> was stable or declining during the Class Period; and (7) competition occurs primarily on the basis of price in the TiO<sub>2</sub> market. *See* Report of Dr. Russell Lamb (“Lamb Report”) ¶¶ 28-62. These factors undergird Dr. Lamb’s conclusion that if a price-fixing conspiracy occurred, that

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<sup>8</sup> For example, Dr. John Beyer, a frequent plaintiffs’ expert in class certification cases, has outlined the relevant market factors used to prove common impact in *The Role of Economics in Class Certification and Class-Wide Impact*, in *LITIGATING CONSPIRACY: AN ANALYSIS OF COMPETITION CLASS ACTIONS* (Stephen Pitel ed. 2006).

conspiracy would have impacted all members of the class by way of artificially inflated prices for TiO<sub>2</sub>.

Following their own script,<sup>9</sup> Defendants argue that certain of these market factors are not present in the market for TiO<sub>2</sub>, and as a result, Dr. Lamb's conclusion that common proof of class-wide impact exists is therefore erroneous. Specifically, Defendants' expert, Dr. Michelle Burtis, contends that: (1) Defendants produce hundreds of different TiO<sub>2</sub> products, and therefore TiO<sub>2</sub> cannot be considered a commodity-like product; (2) TiO<sub>2</sub> pricing is highly complex, individualized, and is not the primary basis for competition among Defendants; and (3) class members had the ability to purchase TiO<sub>2</sub> from producers that are not alleged cartel members, thereby necessitating individual inquiry. *See* Report of Dr. Michelle Burtis ("Burtis Report") ¶¶ 14-57.

Each of these TiO<sub>2</sub> market characteristics will be analyzed below.

*Price increase announcements indicate coordinated behavior.* After analyzing "more than ten years' worth of price increase announcements issued by the Cartel Members," Dr. Lamb concludes that "throughout the Class Period, the Cartel Members announced multiple nearly simultaneous price increases that applied across the board to all users of titanium dioxide, and to all products and grades of titanium dioxide sold by the Cartel Members." Lamb Report ¶ 29. Furthermore, Dr. Lamb concludes that these price increase announcements occurred close-in-time to meetings in which many of the cartel members participated. Accordingly, Dr. Lamb posits that "[w]hile [firms] can certainly announce price increases

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<sup>9</sup> *See* John H. Johnson & Gregory K. Leonard, *Economics and the Rigorous Analysis of Class Certification in Antitrust Cases*, 3 J. COMPETITION L. & ECON., 341, 344-345 (2007) (taking issue with the "prototypical plaintiffs' argument and arguing that "the requirement of common proof of antitrust injury should usually present a substantial hurdle for plaintiffs.").

without coordination, it is hard to explain the same, or nearly the same, price increases being repeatedly announced nearly simultaneously by different firms supposedly acting independently.” *Id.* ¶ 28. In support of his conclusions, Dr. Lamb presents a table summarizing the price increase announcements announced by the Defendants in this case. *See id.* at Table 2. Importantly, Dr. Lamb concludes that the price increase announcements “were efforts by the Cartel Members to confirm their cartel behavior and signal to each other and to their customers that price increases would be implemented and enforced market-wide.” *Id.* ¶ 29.

In response, Defendants’ expert, Dr. Burtis does not take issue with the *existence* of the price increase announcements, but rather, with the *interpretation* of those announcements. Specifically, Dr. Burtis maintains that the price increase announcements by Defendants are not necessarily evidence of collusion. Citing a textbook on industrial organization, Dr. Burtis contends that parallel pricing behavior is a natural consequence of competition in oligopolies, and therefore “it would be expected that a unilateral price increase announcement by one Defendant would influence the decisions of the other Defendants, and that a plausible response would be to announce similar price increases quickly.” Burtis Report ¶ 117. Finally, Dr. Burtis argues that even if price increases were *announced* nearly simultaneously, there is no evidence that they were *implemented* in any uniform way. *Id.* ¶ 116.

This Court finds credible Dr. Lamb’s conclusions that the Defendants implemented multiple nearly simultaneous price increases throughout the class period, and those price increases can be used to prove coordinated pricing. As noted, Dr. Burtis does not dispute

the fact that the price increase announcements were made, but does dispute the inferences that can be drawn from those announcements.

*TiO<sub>2</sub> Market Dominance by Defendants.*

In Plaintiffs' Consolidated Amended Complaint, they allege that Defendants are the leading suppliers of TiO<sub>2</sub> in the world, and control approximately 70 percent of the global production capacity. CAC ¶ 1. Dr. Lamb, using publicly available documents common to the class as a whole, confirmed this assertion, and concludes "class-wide evidence shows that the Cartel Members controlled the vast majority of sales of titanium dioxide to the Class members during the Class Period in this matter." Lamb Report ¶¶ 30-31. The Defendants' Annual Reports and SEC filings confirm this finding and indicate that the Defendants produce between 70 to 75 percent of the world's supply of TiO<sub>2</sub>. *See id.* ¶ 31. Furthermore, Dr. Lamb's analysis concludes that the Cartel Members controlled 98 percent of the North American market for TiO<sub>2</sub> during the Class Period. *Id.* ¶ 34, and Table 4. Dr. Lamb concludes that "[w]hen a small group of firms dominate the market for a product, it makes it easier for them to form a cartel such as the one alleged here." *Id.* ¶ 36.

Dr. Burtis does not directly contradict Dr. Lamb's assertions regarding the market power belonging to the alleged conspirators in this case. Instead, she argues that evidence exists showing that TiO<sub>2</sub> customers had the ability to purchase the product from producers other than the alleged co-conspirators throughout the relevant period. Burtis Report ¶ 57. In this regard, Dr. Burtis argues that the ability to purchase TiO<sub>2</sub> from other producers necessitates individual inquiry into "each putative class member's ability to use TiO<sub>2</sub> products produced 'offshore' and the extent to which they used this ability to negotiate

prices with Defendants. *Id.* However, because Dr. Burtis does not dispute Dr. Lamb's general conclusions that the market for TiO<sub>2</sub> is a highly concentrated one, this Court will take that fact as established, and will address the import of Dr. Burtis' argument in the predominance section *infra*.

*TiO<sub>2</sub> as a commodity-like product & competition based primarily on price*

According to Dr. Lamb, TiO<sub>2</sub> is a commodity-like product and is interchangeable<sup>10</sup> across suppliers. Lamb Report ¶ 37. This factor has two main implications: first, when a product is characterized as a commodity, competition is based primarily on price and, second, when a product is interchangeable with other similar products produced by competitors, coordination among firms is facilitated because "firms wishing to form a cartel can more easily monitor and detect defections from a price-fixing agreement." *Id.* Dr. Lamb concludes that TiO<sub>2</sub> is a commodity-like product even though each Defendant produces numerous different grades of the product for many different applications. In so concluding, Dr. Lamb relies on the Defendants' SEC filings, market research reports, and internal documents indicating that the different grades of TiO<sub>2</sub> produced by one Defendant were fungible with those produced by other Defendants. *See id.* ¶ 40. According to Dr. Lamb, this factor "makes the Cartel for titanium dioxide far more likely."

Dr. Burtis and Defendants take great issue with Dr. Lamb's conclusion that TiO<sub>2</sub> is a commodity-like product. Dr. Burtis contends that, although the TiO<sub>2</sub> products produced by the Defendants all contain the same chemical, they vary widely in their intended use and

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<sup>10</sup> "Interchangeability implies that one product is roughly equivalent to another for the use to which it is put; while there may be some degree of preference for one over the other, either would work effectively." *Queen City Pizza, Inc. v. Domino's Pizza, Inc.*, 124 F.3d 430, 437 (3d Cir. 1997) (citation omitted).

application. Dr. Burtis points to evidence indicating that when TiO<sub>2</sub> purchasers considered changing suppliers, they frequently needed to test the new product to make sure it would work in their production process. Burtis Report ¶ 16. Furthermore, certain TiO<sub>2</sub> purchasers were required to reformulate their production processes to accommodate different TiO<sub>2</sub> products. *Id.* In short, Dr. Burtis has provided substantial evidence indicating that the TiO<sub>2</sub> products produced by the different Defendants were not identical to each other, and that the individual Defendants spent time and money attempting to differentiate their products from those of their competitors.

Notwithstanding this, after reviewing all the evidence, Defendants' contention that titanium dioxide is not a commodity-like product is simply belied by their own characterization of the chemical. For example, in its 2006 Form 10-K,<sup>11</sup> Defendant Millennium stated: “[d]ue to the *commodity nature* of certain of [its] products, competition in [the global titanium dioxide market] is based primarily on price . . .” Lamb Report ¶ 38. Similarly, in its 2010 10-K, Defendant Kronos stated that “the majority of our grades and substantially all of our production are considered *commodity* pigments with price and availability being the most significant competitive factors.” *Id.* Defendants also produced so-called “crosswalk” documents that note which products offered by competitors are compatible or interchangeable with their own. *See id.* ¶ 40 n. 93 and accompanying text.

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<sup>11</sup> Required by the Securities and Exchange Commission, the Form 10-K is a comprehensive annual report summarizing a company's performance and financial condition.

Accordingly, while there is certainly some differentiation among TiO<sub>2</sub> products produced by the Defendants, the Court credits Dr. Lamb's conclusion that TiO<sub>2</sub> is a commodity-like product and that competition among producers is based primarily on price.<sup>12</sup>

*Many buyers in the TiO<sub>2</sub> market.*

Dr. Lamb concludes that each cartel member maintains a large customer base and that there are numerous purchasers of TiO<sub>2</sub>. In this regard, Dr. Lamb asserts that “[w]hen there are many buyers in a market for a particular good, a cartel such as the one alleged here is more likely to be effective.” Lamb Report ¶ 44. “This is because the incentive to a cartel member for undercutting the conspiracy is lower when there are many smaller purchasers since each potential sale is small while the risk of disrupting the cartel can carry large penalties.” *Id.* Dr. Burtis does not dispute the fact that the buying side of the TiO<sub>2</sub> market is unconcentrated. Accordingly, the Court will take this fact as established.

*High barriers to entry.*

Next, Dr. Lamb concludes that there are high barriers to entry in the market for TiO<sub>2</sub>. Specifically, there is a significant level of capital investment required to build a competitive TiO<sub>2</sub> manufacturing facility—it is estimated that a new plant would require \$250-500 million and three to five years to build. Lamb Report ¶¶ 49-50. Additionally, the current TiO<sub>2</sub> producers hold patents for the proprietary productions processes, which would impose another significant barrier to entry into the market. Defendants and Dr. Burtis do

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<sup>12</sup> This conclusion relates only to the commodity-like nature of TiO<sub>2</sub>. Defendants' arguments that pricing for TiO<sub>2</sub> is determined by individual negotiations and varied contract terms will be discussed in the predominance section *infra*.

not dispute the fact that there are high barriers to entry in the TiO<sub>2</sub> market, and this Court will take this fact as established.

*Stable or declining demand for titanium dioxide and excess production capacity*

Dr. Lamb concludes that demand for TiO<sub>2</sub> experienced a 34.8 percent decline between 2002 and 2009. Lamb Report ¶ 60. Moreover, he concludes that during this period, there was significant excess capacity in the production of the chemical—meaning that TiO<sub>2</sub> producers were producing less of the chemical than their capabilities allowed. *Id.* ¶ 71-74. According to Dr. Lamb, standard economic theory predicts that, in the absence of a cartel, these factors would lead to falling prices for TiO<sub>2</sub> as a result of competition for market share among competitors. *See id.* ¶ 69. However, Dr. Lamb determined that prices for TiO<sub>2</sub> did not fall as economic theory predicts, but instead rose significantly during the Class Period. *Id.* ¶ 70. According to Dr. Lamb, “[t]his combination of stable or falling demand and increasing prices constitutes common proof that the effect of the anticompetitive behavior which forms the heart of this Cartel was to raise prices above those that would have prevailed in the market otherwise.” *Id.*

While Dr. Burtis disputes Dr. Lamb’s conclusion that these market factors constitute common proof of class-wide impact, she does not directly refute his underlying findings—that demand for TiO<sub>2</sub> declined during the Class Period and that substantial excess capacity existed in the industry. Accordingly, this Court will take those facts as established, and will consider their import below.

## B. Predominance

In considering the Rule 23(b)(3) predominance requirement, “a court’s rigorous analysis begins with the elements of the underlying cause of action.” *In re Rail Freight*, 2012 WL 2870207, at \*30. “If proof of the essential elements of the cause of action requires individual treatment, then class certification is unsuitable.” *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 311.

To establish an antitrust violation, a plaintiff must prove three elements: (1) a violation of the antitrust laws—here, Section 1 of the Sherman Act; (2) individual injury resulting from that violation; and (3) measurable damages. *See* 15 U.S.C. § 1; *Deiter v. Microsoft Corp.*, 436 F.3d 461, 467 (4th Cir. 2006). However, at the class certification stage, Plaintiffs need only show by a preponderance of the evidence that these elements are “capable of proof at trial through evidence that is common to the class rather than individual to its members.” *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 311-12 (emphasis added). Each element is addressed in turn.

### *i. Violation of Antitrust Law*

Plaintiffs allege that Defendants conspired to fix the price of TiO<sub>2</sub>. CAC ¶ 2. This type of horizontal price-fixing scheme, if it existed, is a *per se* violation of the Sherman Act. *See Texaco, Inc. v. Dagher*, 547 U.S. 1, 5 (2006). Defendants do not dispute that this element may be proved by common evidence. *See* Defs.’ Class Opp’n at 15; *see also* 7AA FEDERAL PRACTICE AND PROCEDURE § 1781 (3d ed. 2005) (“whether a conspiracy exists is a common question that is thought to predominate over the other issues in the case and has the effect of satisfying the first prerequisite in Rule 23(b)(3)”). The question of whether a conspiracy

to fix the price of TiO<sub>2</sub> existed is a fact capable of common proof because “plaintiffs’ allegations of price fixing indisputably will focus on the actions of the defendants, and, as such, proof for these issues will not vary among class members.” *In re Rail Freight*, 2012 WL 2870207, at \*31 (quotation and citations omitted). Accordingly, this Court finds by a preponderance of the evidence that the element of antitrust injury is capable of proof at trial through evidence that is common to the class.

The Court now turns to the real crux of Defendants’ opposition to class certification—that is, whether the Plaintiffs can prove the elements of common impact and damages on a class-wide basis.

## ***ii. Impact***

The second element the Plaintiffs will need to establish is that the class members suffered injury from the alleged price-fixing conspiracy.<sup>13</sup> This element, commonly referred to as “impact,” can be “likened to the causation element in a negligence cause of action. The term means simply that the antitrust violation caused injury to the antitrust plaintiff.” *In re Urethane Antitrust Litig.*, 252 F.R.D. 629, 634 (D. Kan. 2008) (quoting *State of Alabama v. Blue Bird Body Co.*, 573 F.2d 309, 317 (5th Cir. 1978)). Of course, at this stage in the litigation, the

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<sup>13</sup> This elements involves two distinct questions: “One is the familiar factual question whether the plaintiff has indeed suffered harm, or ‘injury-in-fact.’ The other is the legal question whether any such injury is ‘injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants’ acts unlawful.” *Cordes & Co. Fin. Servs., Inc. v. A.G. Edwards & Sons, Inc.*, 502 F.3d 91, 106 (quoting *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489 (1977)). Because Plaintiffs in this case allege only one injury—that they were subjected to artificially inflated prices for TiO<sub>2</sub> as a result of a price-fixing conspiracy in violation of Section 1 of the Sherman Act—the Defendants do not challenge this element. *See Cordes*, 502 F.3d at 107 (“Because each class member allegedly suffered the same type of injury, the legal question of whether such an injury is ‘of the type the antitrust laws were intended to prevent and that flows from that which makes defendants’ acts unlawful,’ *Brunswick*, 429 U.S. at 489, is a common one.”). Accordingly, the legal question of injury is common to the class, and this Court will focus on the first prong of the impact analysis—whether the class members suffered “injury-in-fact.”

Plaintiffs need not *prove* this element, “[i]nstead, the task for plaintiffs at class certification is to demonstrate that the element of antitrust impact is *capable of proof* at trial through evidence that is common to the class rather than individual to its members.” *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 311-12 (emphasis added). In other words, Plaintiffs’ burden of showing antitrust impact is “satisfied by its proof of *some damage* flowing from the unlawful conspiracy; inquiry beyond this minimum point goes only to the amount and not the fact of damage. It is enough that the illegality is shown to be a material cause of the injury.” *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 114 n.9 (1969) (emphasis added).

To meet their burden, therefore, Plaintiffs must show, using evidence common to the class, that class members paid a higher price for TiO<sub>2</sub> from Defendants than they would have absent the alleged conspiracy. *See Hanover Shoe*, 392 U.S. 481, 489. In *Blades v. Monsanto Co.*, the Eighth Circuit defined common proof as follows:

The nature of the evidence that will suffice to resolve a question determines whether the question is common or individual. If, to make a prima facie showing on a given question, the members of a proposed class will need to present evidence that varies from member to member, then it is an individual question. If the same evidence will suffice for each member to make a prima facie showing, then it becomes a common question.

400 F.3d at 566 (citations omitted).

As is often the case in horizontal price fixing cases, Plaintiffs here seek to show this element is capable of common proof by comparing a hypothetical “but-for” price—*i.e.*, the price that would have been paid in the absence of the conspiracy—with the prices actually paid by the Plaintiffs during the Class Period. *See In re EPDM Antitrust Litig.*, 256 F.R.D. 82, 88 (D. Conn. 2009). In this kind of but-for comparison, prices are analyzed in a scenario that is “free of the restraints and conduct alleged to be anticompetitive.” *In re Rail Freight*,

2012 WL 2870207, at \*41 (quoting *Blades v. Monsanto, Co.*, 400 F.3d at 569. If Plaintiffs can show that they paid a higher actual price than the but-for price using evidence common to the class, they have met their burden on the impact element.

As the *Rail Freight* court recently summarized, there are various methods by which plaintiffs may prove that common evidence is capable of proving impact:

[O]ne way of showing that common questions predominate on the issue of injury-in-fact

is to show that there is a common method for proving that the class plaintiffs paid higher actual prices than in the but-for world, such as using an economic regression model incorporating a variety of factors to demonstrate that a conspiracy variable was at work during the class period, raising prices above the “but-for” level for all plaintiffs.

*In re EPDM Antitrust Litig.*, 256 F.R.D. at 88. . . .

Comparing but-for prices with actual transaction prices by regression analysis, however, is not the only way for plaintiffs to succeed in a motion for class certification. Other accepted types of evidence for establishing class-wide injury-in-fact include: evidence of lock-step increases of national price lists; proof that defendants conspired to maintain an inflated base price from which all negotiations began; and evidence of structural factors that make an industry susceptible to successful collusion. Ultimately, the question is whether plaintiffs have shown by a preponderance of the evidence—through regressions, structural industry factors, or any other persuasive means—that methods of common proof exist to show class-wide impact.

*In re Rail Freight*, 2012 WL 2870207, at \*41 (internal quotations and citations omitted).

Plaintiffs in this case seek to prove impact by way of all the enumerated methods above—they proffer class-wide evidence in the form of: (1) industry characteristics tending to show that the TiO<sub>2</sub> industry was ripe for collusion before the alleged conspiracy; (2) evidence of nearly simultaneous (lock-step) price increase announcements during the relevant period; (3) Defendants’ own transactional data showing that prices rose over the

period; (4) evidence showing that even if the price increase announcements were not “implemented” uniformly, they nevertheless served to set an artificially high base level upon which the Defendants’ began negotiations; (5) a multiple regression model designed by Dr. Lamb that attempts to show that, absent the alleged conspiracy, the but-for prices for TiO<sub>2</sub> would have been lower; and (6) a pricing structure analysis that attempts to show that prices for TiO<sub>2</sub> would have responded similarly to coordinated pricing activity.

In arguing that common evidence exists to show impact on a class-wide basis, Plaintiffs rely heavily on the fact that defendants announced multiple nearly simultaneous price increase announcements throughout the class period. Plaintiffs argue that these price increase announcements amount to common proof insofar as they served to raise prices for TiO<sub>2</sub> across the board for all purchasers. Defendants counter that, regardless of the price increase *announcements*, the evidence shows that price increases were not *implemented* uniformly, and more importantly, individual TiO<sub>2</sub> transactions between buyers and sellers were the result of extensive negotiations between the parties. This is a valid point, and there certainly is substantial evidence showing that the end prices paid by TiO<sub>2</sub> customers were the product of individual negotiation. *See, e.g.* Burtis Report ¶¶ 34-56. However, according to the Plaintiffs, these price increase announcements served to set an artificially high baseline for price negotiations, and point to compelling evidence supporting this proposition. *See, e.g.*, Lamb Rebuttal ¶ 91 nn. 115-16 and accompanying text, ECF No. 306-1.

Having reviewed the submissions and the parties’ arguments, this Court concludes that the evidence of the nearly simultaneous price increase announcements, in conjunction with the structural factors present in the TiO<sub>2</sub> industry, *see supra*, makes the element of

antitrust impact “capable of proof at trial through evidence that is common to the class rather than individual to its members.” *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 311-12. As discussed in *In re Rail Freight*, “this case falls within the line of cases holding that class-wide injury-in-fact can be proven at trial by showing that the allegedly conspiratorial [price increases] were the starting point from which negotiations for discounts began.” 2012 WL 2870207, at \*62 (collecting cases).

Next, the Plaintiffs argue that class-wide impact can be demonstrated by showing that the prices actually paid by TiO<sub>2</sub> customers were higher than they would have been but-for the conspiracy. To do this, Plaintiffs rely on a multiple regression model created by Dr. Lamb. As described in a reference guide published by the Federal Judicial Center:

Multiple regression analysis is a statistical tool used to understand the relationship between or among two or more variables. Multiple regression involves a variable to be explained—called the dependent variable—and additional explanatory variables that are thought to produce or be associated with changes in the dependent variable. For example, . . . in an antitrust cartel damages case, the plaintiff’s expert might utilize multiple regression to evaluate the extent to which the price of a product increased during the period in which the cartel was effective, after accounting for costs and other variables unrelated to the cartel. The defendant’s expert might use multiple regression to suggest that the plaintiff’s expert had omitted a number of price-determining variables.

DANIEL L. RUBINFELD, REFERENCE GUIDE ON MULTIPLE REGRESSION 305-06 (Fed. Judicial Ctr., 3d ed. 2011).

In his report, Dr. Lamb explains the variables used in his regression analysis to isolate the effect of the cartel on prices for TiO<sub>2</sub>. Lamb Report ¶¶ 75-95. He concludes that, as a result of the cartel, prices for TiO<sub>2</sub> were more than seven percent higher during the Class

Period. *Id.* ¶ 94. Defendants attack Dr. Lamb’s regression model on numerous grounds which will not be discussed in detail here. That is because:

The real question before this court is whether the plaintiffs have established a *workable* multiple regression equation, not whether plaintiffs’ model actually *works*, because the issue at class certification is not which expert is the most credible, or the most accurate modeler, but rather have the plaintiffs demonstrated that there is a way to prove a class-wide measure of [impact<sup>14</sup>] through generalized proof.

*In re EPDM Antitrust Litig.*, 256 F.R.D. at 100.

In short, this Court finds that Dr. Lamb’s regression analysis accurately reflects the characteristics of the titanium dioxide industry, and the facts in this case. While his model may not be perfect,<sup>15</sup> this Court concludes that a regression model is certainly *capable* of proving class-wide impact at trial. In light of the structural factors in the TiO<sub>2</sub> industry, this case falls squarely within the type of case that courts have found well-suited to regression analyses. *See, e.g. In re Rail Freight Antitrust Litig.*, 2012 WL 2870207, at \*72 (collecting cases). Defendants’ quibbles with Dr. Lamb’s regression model largely center on the *results* of his analysis—in other words, Defendants argue that if Dr. Lamb included more data, or extended certain dates, his very own regression would show that prices of TiO<sub>2</sub> did not increase during the time period. However, by “merely disputing the *results* of the plaintiffs’ experts’ analysis rather than the feasibility of using a single formula methodology,” Defendants raise a “merits issue, not a class certification issue.” *In re EPDM Antitrust Litig.*,

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<sup>14</sup> The *EPDM* court made this statement in the context of evaluating the damages prong of the predominance inquiry. However, it is equally applicable on the “impact” prong as well.

<sup>15</sup> Dr. Lamb notes that his model is “preliminary, given that discovery is ongoing.” He states that he is “highly confident that a model similar to this one will be capable of showing the degree to which prices were artificially inflated as a result of the Cartel and computing aggregate overcharges to the Class as a whole at trial.” Lamb Report ¶ 82.

256 F.R.D. at 96. Considering similar arguments, the United States District Court for the Southern District of New York recently stated:

[D]efendants do not assert that plaintiffs have failed to prove some factual predicate necessary for demonstrating causation and artificiality on a class-wide basis. Instead, defendants' objections go *solely* to whether plaintiffs' models will *in fact* demonstrate causation and artificiality, and hence, are unrelated to the requirements of class certification. Indeed, by arguing that plaintiffs' models, as corrected by defendants' expert, show that Amaranth did not cause any artificiality during the Class Period, defendants impliedly concede that causation can be evaluated on a class-wide basis.

*In re Amaranth Natural Gas Commodities Litig.*, 269 F.R.D. 366, 385 (S.D.N.Y. 2010).

Accordingly, this Court concludes that Dr. Lamb's multiple regression model is "capable" of proving class-wide impact at trial "through evidence that is common to the class rather than individual to its members." *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 311-12. Defendants will be free to attack the probativeness of that model or its perceived shortcomings as they see fit.

As previously noted, "[b]ecause the nature of the evidence that will suffice to resolve a question determines whether the question is common or individual, a district court must *formulate some prediction* as to how specific issues will play out in order to determine whether common or individual issues predominate in a given case." *Id.* (internal quotations and citations omitted, emphasis added). It does not take a crystal ball to predict the way this case will play out at trial—Plaintiffs will overwhelmingly rely on common evidence to prove the existence of a price-fixing conspiracy. Accordingly, "[c]ommon questions predominate where 'even if each Class Member . . . were to bring suit individually, each plaintiff would have to allege and prove virtually identical facts.'" *In re EPDM Antitrust Litig.*, 256 F.R.D. at

103 (quoting *In re Merrill Lynch & Co. Research Reports Sec. Litig.*, 246 F.R.D. 156, 165 (S.D.N.Y. 2007)).

### *iii. Damages*

The final element Plaintiffs will have to prove at trial is that they suffered “measurable damages.” *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 311. In contrast to the “impact” prong of the Rule 23(b) analysis, which asks only “*whether* the plaintiffs were harmed,” the damages prong asks “by how much.” *In re EPDM Antitrust Litig.*, 256 F.R.D. at 88. At the class certification stage, Plaintiffs must show, by a preponderance of the evidence, that they will be able to prove damages using common proof. *In re Rail Freight*, 2012 WL 2870207, at \*74.

In this case, Plaintiffs argue that common proof of damages exists in the form of Dr. Lamb’s regression analysis. Dr. Lamb contends that his regression method is “a standard economic method [ ] that is capable of being used to compute aggregate damages to the class as a whole.” Lamb Report ¶ 114. Briefly, he uses his regression analysis to arrive at a seven percent overcharge during the course of the alleged conspiracy (*i.e.*, prices for TiO<sub>2</sub> were seven percent higher than they would have been absent the conspiracy). He then proposes to multiply the total volume of TiO<sub>2</sub> purchases by Class Members during the period by that percentage overcharge to arrive at “the total amount of damages owed to the Class.” *Id.* ¶ 116. In other words, Dr. Lamb’s regression is only capable of calculating an “aggregate” overcharge that is not capable of distinguishing between individual class members.

As the well-developed economic literature on cartels, relied on by Plaintiffs for their “impact” argument, makes clear, certain structural factors in an industry make collusion more attractive or more feasible. At the same time, however, that same literature teaches that one cannot assume an illegal price-fixing agreement would damage each class member in the same manner. That is because those very same structural factors that encourage collusion also encourage “cheating” by co-conspirators, thereby rendering individual damage amounts different among the members of a class. This theory, first enunciated by Nobel laureate George Stigler in *A Theory of Oligopoly*, 72 J. Pol. Econ. 44, 46 (1964), is well-established in the antitrust context. *See, e.g.*, RICHARD A. POSNER, ANTITRUST LAW 60-69 (2d ed. 2001). As demonstrated by Stigler, the empirical evidence indicates that even where a horizontal price-fixing agreement has been reached, that agreement will likely result in a range of impacts across the class. 72 J. Pol. Econ. At 46.

The Fourth Circuit has consistently held that “average” or “aggregate” damages are not an appropriate measure of damages in an antitrust case. For example, in *Windham v. Am. Brands, Inc.*, the court stated, “[t]he language that Congress used in [the Antitrust statute] . . . leaves no room for awarding damages to some amorphous ‘fluid class’ rather than, or in addition, to one or more actually injured persons. It likewise does not permit any person to recover damages sustained not by him, but by someone else who happens to be a member of such class.” 565 F.2d 59, 66 (4th Cir. 1977) (quotations and citation omitted). While individual issues do not predominate for the purposes of this Court’s “impact” analysis, individual issues certainly overshadow common issues with respect to damages. For example, as the Defendants have clearly shown, some level of individual negotiation took

place between buyers and sellers of TiO<sub>2</sub> regarding rebates, price, non-price terms, and the like. If a price-fixing conspiracy existed, it is clear that such a conspiracy would necessarily have damaged the individual class members differently.

The need to inquire into individual damage calculations, however, is not an impediment to class certification. As summarized by the Fourth Circuit, a damages inquiry *necessarily* requires individual proof:

. . . Rule 23 contains no suggestion that the necessity for individual damage determinations destroys commonality, typicality, or predominance, or otherwise forecloses class certification. In fact, Rule 23 explicitly envisions class actions with such individualized damage determinations. *See* Fed. R. Civ. P. 23 advisory committee's note (1966 Amendment, subdivision (c)(4)) (noting that Rule 23(c)(4) permits courts to certify a class with respect to particular issues and contemplates possible class adjudication of liability issues with "the members of the class . . . thereafter . . . required to come in individually and prove the amounts of their respective claims."); *see also* 5 *Moore's Federal Practice* § 23.23[2] (1997) ("[T]he necessity of making an individualized determination of damages for each class member generally does not defeat commonality.").

Indeed, "[i]n actions for money damages under Rule 23(b)(3), courts *usually* require individual proof of the amount of damages each member incurred." *Id.* at § 23.46[2][a] (1997) (emphasis added). When such individualized inquiries are necessary, if "common questions predominate over individual questions as to liability, courts generally find the predominance standard of Rule 23(b)(3) to be satisfied." *Id.*

*Gunnells v. Healthplan Servs., Inc.*, 348 F.3d 417, 427-28 (4th Cir. 2003). Given the inherent difficulties in assessing individual damages questions in this type of case, the Court notes that it has several options with which to consider damages at a future date. As discussed by the Second Circuit, there are at least five methods to deal with the individual damages inquiry:

(1) bifurcating liability and damage trials with the same or different juries; (2) appointing a magistrate judge or special master to preside over individual damages proceedings; (3) decertifying the class after the liability trial and providing notice to class members concerning how they may proceed to prove damages; (4) creating subclasses; or (5) altering or amending the class.

*In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 141 (citations omitted). Indeed, the Fourth Circuit in the *Gunnells* case reiterated its previous admonition to “take full advantage of the provision in [Rule 23(c)(4)] permitting class treatment of separate issues . . . to reduce the range of disputed issues in complex litigation.” 348 F.3d at 426 (quoting *In re A.H. Robins Co., Inc.*, 880 F.2d 709, 740 (4th Cir. 1989)).

Accordingly, while there exist numerous individual questions of damages, that is not enough to defeat class certification, and one or more of the above-listed methods may need to be utilized as this case progresses. *See Gunnells*, 348 F.3d at 427 (“class certification ‘provides a single proceeding in which to determine the merits of the plaintiffs’ claims, and therefore protects *the defendant* from inconsistent adjudications.”) (quoting 5 *Moore’s Federal Practice* § 23.02 (1999)).

### **C. Superiority**

The final requirement of Rule 23(b)(3) is that this Court must determine that “a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” Fed. R. Civ. P. 23(b)(3). “In deciding whether certification of a class is superior to other trial methods, the Court considers whether the resolution of common issues advances the litigation as a whole, as opposed to leaving a large number of issues for case-by-case adjudication.” *In re Polyester Staple Antitrust Litig.*, 2007 WL 2111380, at \*31 (W.D.N.C. July 19, 2007) (internal quotation and citation omitted). Here, the Defendants

have not specifically argued that the superiority prong has not been met, and this Court concludes that because common issues predominate, class action treatment is superior to other available methods of adjudicating the Plaintiffs' claims. In short, class treatment will "achieve economies of time, effort, and expense, and promote . . . uniformity of decision as to persons similarly situated, without sacrificing procedural fairness or bringing about undesirable results." *Amchem*, 521 U.S. at 615.

### III. ADDITIONAL ISSUES

Rule 23(c)(1)(C) of the Federal Rules of Civil Procedure provides simply that "[a]n order that grants or denies class certification may be altered or amended before final judgment." Fed. R. Civ. P. 23(c)(1)(C). This Court has previously stated that "[a] district court has 'broad discretion in determining whether the action may be maintained as a class action,' . . . and so long as the court considers the proper criteria, it is permitted to exercise such discretion." *Doe v. Lally*, 467 F. Supp. 1339, 1345 (D. Md. 1979) (citations omitted). As this court previously held, "[a] federal district court possesses the same broad discretion in determining whether to modify or even decertify a class." *Wu v. MAMSI Life & Health Ins. Co.*, 256 F.R.D. 158, 162 (D. Md. 2008) (citing *Gen. Tel. Co. of the Sw. v. Falcon*, 457 U.S. 147, 160 (1982)). In fact, a federal district court judge has an affirmative obligation to ensure that the class membership remains at all times consistent with the underlying facts and procedural posture of the case. See *Richardson v. Byrd*, 709 F.2d 1016, 1019 (5th Cir. 1983) ("Under Rule 23 . . . the district judge must define, redefine, subclass, and decertify as appropriate in response to the progression of the case from assertion to facts."); *Chisolm v. TranSouth Fin. Corp.* 194 F.R.D. 538, 544 (E.D. Va. 2000) ("[T]he Court is duty bound to

monitor its class decision and, where certification proves improvident, to decertify, subclassify, alter, or otherwise amend its class certification.”).

Here, in opposing class certification, the Defendants have raised several additional issues that do not fit neatly into the previously discussed Rule 23 categories. For example, Defendants claim that many members of the putative class entered into contracts with Defendants that contain mandatory arbitration provisions, forum-selection clauses, and jury waiver provisions. Neither party briefed these issues extensively, and they were only briefly addressed at the August 13 class certification hearing. Because it is unclear to what extent the putative class members have this type of contractual provision, and to what extent the Defendants will seek to uphold those agreements, this Court concludes that “the possible arbitration [or other contractual bar] of some class members does not, by itself, defeat class certification.” *In re Rail Freight Antitrust Litig.*, 2012 WL 2870207, at \*28 (internal quotation and citation omitted).

Accordingly, to the extent certain putative class members’ contracts render them atypical of the class as a whole, this Court will exercise its discretion to amend its class certification Order as necessary.

#### **IV. RULE 23(g)—APPOINTING CLASS COUNSEL**

Pursuant to the 2003 amendments to Rule 23, the qualifications and experience of Plaintiffs’ counsel are now considered under Rule 23(g). Rule 23(g)(1) provides that “a court that certifies a class must appoint class counsel.” Fed. R. Civ. P. 23(g)(1). In appointing class counsel, a court must consider:

- (i) the work counsel has done in identifying or investigating potential claims in the action;

- (ii) counsel's experience in handling class actions, other complex litigation, and the types of claims asserted in the action;
- (iii) counsel's knowledge of the applicable law; and
- (iv) the resources that counsel will commit to representing the class[.]

*Id.* This Court has already appointed the following interim co-lead class counsel: Gold Bennett Cera & Sidener LLP; Leiff, Cabraser, Heimann & Bernstein LLP; and the Joseph Saveri Law Firm. *See* Amended Case Mgmt. Order, ECF No. 326. Those law firms, with the addition of Eric L. Cramer of Berger & Montague, P.C. and Linda Nussbaum of Grant & Eisenhofer, P.A. have been appointed members of the Plaintiffs' Executive Committee. *See* Case Mgmt. Order, ECF No. 106. Finally, Paul Mark Sandler of Shapiro Sher Guinot & Sandler has been appointed Liaison Counsel. *See id.* As noted by the Plaintiffs:

Since their initial appointment, the above-listed firms . . . have devoted substantial time and resources to this case, including complex legal matters on a variety of motions, case management, discovery planning, and extensive meetings and conferrals with Defendants regarding ongoing discovery. Moreover, proposed Class Counsel have demonstrated their extensive experience and expertise prosecuting antitrust, class action, and complex civil litigation cases and have successfully litigated antitrust class actions and other similar cases in courts throughout the United States.

Pls. Class Mem. at 41-42.

Defendants do not object or disagree with the Plaintiffs' characterization of their representation. This Court has reviewed the Rule 23(g)(1) requirements, and concludes that Plaintiffs' proposed co-lead counsel are well qualified to represent the class in this case. Accordingly, those counsel listed above will be appointed class counsel.

**CONCLUSION**

For the reasons stated above, this Court finds by a preponderance of the evidence that the Plaintiffs have established each necessary element of Rule 23 of the Federal Rules of Civil Procedure. Accordingly, Plaintiffs' Motion for Class Certification and for Appointment of Class Counsel (ECF No. 246) will be GRANTED.

Dated: August 28, 2012

A separate Order follows.

/s/  
Richard D. Bennett  
United States District Judge